

COST and MANAGEMENT

THE OFFICIAL JOURNAL OF

THE CANADIAN SOCIETY OF
COST ACCOUNTANTS & INDUSTRIAL ENGINEERS

INCORPORATED 1920
HEADQUARTERS, 301 MACKAY BUILDING,
66 KING STREET EAST, HAMILTON
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Vol. XIII

October, 1938

No. 10

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Subscription price to non-members, \$5 a year. Single copies 50 cents.
Members desiring 5 copies or more of a single issue may obtain them
at 25 cents each.

• EDITORIAL •

Selling Itself

Recently at a convention of Chambers of Commerce, held in the Province of Quebec, Professor Cameron, of the Department of Industrial Relations at Queen's University, stated that it was high time that industry began to sell itself to the general public by means of Public Relations Counsels. He pointed out that the C. I. O. and other labour organizations had for some time made capital out of the fact that certain businesses had, from time to time, used methods which, according to the C. I. O. and other such organizations, had worked to the detriment of the worker. Professor Cameron considered that all business was being blamed for the sins of a few, and that unless and until business began to sell itself to the general public, that same public would believe only what it heard concerning business, and up to now all, or at least most of what it heard, was distinctly unfavourable to business.

There is much truth in this assertion. For instance, very few people know the contribution business makes to governments in the way of taxation, of the difficulties encountered in maintaining business on an even keel, or of even keeping an industry functioning in times such as we have passed through in recent years. Maybe the use of Public Relations Counsels is not the complete answer, but at least it would give the general public the other side of the question.

The Strain is Over

Once more the people of the world can breathe easily, for, by a master stroke, at the last moment, war was averted. In some places the U. S. A. is given credit; in Italy, Premier Mussolini is the hero who averted war, while in Germany even Herr Hitler is credited with being the one who averted a war and consequent world chaos.

As Canadians, we can be pardoned if we, in turn, rather incline to the belief that Premier Neville Chamberlain was the guiding genius who brought the world from darkness into daylight, from madness to sanity once more. However, we should not be concerned so much with giving the credit to anyone in particular, history will take care of that. What we are concerned with is the fact that the world, or most of it, is at peace, that plans already in the making will probably ensure European peace for many years to come. That is something to be thankful for, something for which we should feel eternally grateful, and something we should take full advantage of.

AT HEADQUARTERS

Just when business began to show signs of improvement, and that improvement had previously been retarded through various crises in Europe, the latest and most serious crisis occurred. In the U. S. A., it is said that business stood the latest crisis very well indeed, but now that it is all over and there is little, if any, prospect of any further trouble, what will happen to business? Will it jump ahead far too fast for its own good, or will it gain ground in an orderly, if reasonably slow, manner?

Certainly we can now pay a little more attention to business than we have been able to during the past few hectic weeks, and one is inclined to think that business will show considerable gains during the next month or so.

The danger is perhaps that the gains may be too fast, and that is what business should guard against, according to economists who aver that an improvement in business conditions which travels too fast will react to the disadvantage of business later on.

On all sides, during the days since the European crisis was averted, there is a distinctly better tone among business men than for some considerable time, and the signs point to a revival. Whether or not this revival will take the form of a mild boom is something else again, but one is inclined to think not. If big business has not yet learned its lesson it is high time it did.

At Headquarters

In attending the opening meeting of the Hamilton Chapter, which, by the way, was a joint meeting with Toronto, Hamilton, Kitchener and Niagara Chapters participating, one could not help feeling that our Society has taken a new lease on life.

The attendance was excellent, there being one hundred and twenty for dinner, and approximately one hundred and seventy for the meeting. But the atmosphere was even better than usually prevails at these joint meetings. There was a spirit of comaradie prevalent which augurs well for the future, and which converted this meeting from "just another meeting" to just about the best this writer has attended in years.

All Chapters did their part in making this meeting one to be remembered. Toronto brought up sixty-one, Kitchener and Niagara both had fifteen present, together with several guests, and Hamilton brought the balance. Kris Mapp, our Dominion President, was the speaker, and he was at his best, which is saying something. His talk will appear later in "Cost and Management," and this was requested on all sides.

Members are coming in steadily, and from now on should come to us more rapidly, and several are listed on another page in this issue.

By the time these lines are read, the writer will be in Western Canada in an effort to organize several new Chapters, and the prospects are bright.

Undoubtedly we are in for a record year, but that does not mean that any one of us can relax. There is still plenty of work to be done by each individual member in building up the Society to real strength.

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Chapter Programs

The following are the various Chapter programs so far as they have been arranged at the time of going to press.

HAMILTON CHAPTER

PROGRAM. SEASON 1938-39

September 29th—Opening meeting. Speaker: Kris. A. Mapp, F.C.A., Henry Barber, Mapp & Mapp, Toronto, President Canadian Society of Cost Accountants and Industrial Engineers. Subject, "Some Problems as Between Business and Governments."

October 20th—Joint meeting with Kitchener Chapter, at Kitchener.

October 27th—Speaker: Hon. C. D. Howe, Minister of Transport, Dominion Government, Ottawa. Subject, "Air Transportation as an Aid to Canadian Business." Dinner meeting at Royal Connaught Hotel.

November 3rd—Speaker: H. M. Loree, Trico Products Ltd., Buffalo, N.Y. Subject, "The Preparation of Cost Data."

November 17th—Plant visit to Remington Rand Ltd., plant. Speaker and subject to be announced.

December 5th—Speaker: J. Clark Ryan, Colonial Radio Corporation, Buffalo, N.Y. Subject, "Micro Motion Analysis."

January 25th—Joint meeting with Toronto Chapter, at Toronto.

February 9th—Speaker and subject to be announced.

February 23rd—Joint meeting with Niagara Peninsula Chapter, at St. Catharines.

March 9th—Speaker: R. B. Taylor, C.A., Assistant Comptroller, General Steel Wires Ltd., Toronto. Subject, "Waste Control."

March 23rd—Annual smoker.

April 6th—Closing meeting. Speaker and subject to be announced.

KITCHENER CHAPTER

PROGRAM. SEASON 1938-39

September 29th—Opening meeting, at Hamilton in conjunction with Toronto, Hamilton and Niagara Peninsula Chapters. Speaker: H. A. Mapp, F.C.A., Toronto, President of the Society. Subject, "Some Problems as Between Business and Governments."

October 20th—Plant visit to B. F. Goodrich Co., Ltd., 3 to 5 p.m. Conducted tour through the plant. 5 to 6 p.m. mechanical accounting demonstration. 6.30 p.m. dinner at Walper House Hotel. 7.30 p.m. meeting at Walper House Hotel. Speaker: Frank Knapp, B. F. Goodrich Co., Ltd., Kitchener. Subject, "Recipe and Processing Costs." This is a joint meeting with Hamilton Chapter.

November 17th—Speaker: Rutherford Williamson, F.C.A., Toronto. Subject, "Costing in the Boot and Shoe Industry."

December 20th—Annual smoker.

January 19th—Speaker: W. S. Ferguson, C.A., Shaw Schools, Ltd., Toronto. Subject, "Wage Incentives."

February 16th—Speaker and subject to be announced.

CHAPTER PROGRAMS

March 17th—Speaker and subject to be announced.

April 20th—Speaker: C. D. Landell, Canada Dry Ginger Ale Co., Ltd
Subject, "Cost Reports as an Aid to Management."

May—Closing meeting. Speaker and subject to be arranged.

NIAGARA CHAPTER

PROGRAM. SEASON 1938-39

September 29th—Opening meeting. Joint meeting at Hamilton in conjunction with Toronto, Hamilton and Kitchener Chapters. Speaker: K. A. Mapp, F.C.A., President Canadian Society. Subject: "Some Problems as Between Business and Governments."

October 19th—Speaker: Roy Waltemade, Rudolph Wurlitzer Co., North Tonawanda, N.Y. Subject, "Simplicity in Production Cost Control."

November 16th—Speaker: G. R. M. Dingle, Comptroller, Massey-Harris Co. Ltd., Toronto. Subject, "The Value of Cost Data to Management."

December 19th—Annual smoker.

January 18th—Speaker: W. E. Drexel, Comptroller, Thompson Products Ltd. Subject to be announced.

February 23rd—Joint meeting with Hamilton Chapter, at St. Catharines. Speaker: C. Oliver Wellington, Partner, McKinsey, Wellington & Co., New York. Subject, "Responsibility of the Accountant to Management."

March 16th—Speaker: H. E. Riordon, Comptroller, Colonial Radio Corpn., Buffalo, N.Y. Subject, "Costing Problems in Our Business."

April 19th—Speaker: F. M. Post, Union Carbide Co., Niagara Falls, N.Y. Subject, "Control of Factory Overhead."

May—Closing meeting. Speaker and subject to be arranged.

LONDON CHAPTER

PROGRAM. SEASON 1938-39

October 20th—Opening meeting. Speaker: Kris. A. Mapp, F.C.A., President, Canadian Society of Cost Accountants and Industrial Engineers. Subject, "Some Problems as Between Business and Governments."

November 17th—Speaker: Professor Philip H. Hensel, Western University. Subject, "The Statistical Control of Business."

December 20th—Plant visit. John Labatt's Limited. Dinner in Labatt's dining hall. Speaker: H. White, John Labatt's Ltd. Subject to be announced.

January 19th—Speaker: A. G. Howey, Mercury Mills, Ltd., Hamilton. Subject, "Budgetary Control."

February 16th—Speaker: J. P. Masterman, C.G.A., Hiram Walker-Gooderham & Worts, Walkerville, Ont. Subject, "Installation and Control of Plant Ledgers."

March 16th—Speaker: R. F. Bruce-Taylor, C.A., Edwards, Morgan & Co., Toronto. Subject, "The Industrial Accountant from the Auditor's Viewpoint."

April 18th—Subject and speaker to be announced.

May—Closing meeting. Speaker and subject to be arranged.

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MONTREAL CHAPTER
PROGRAM. SEASON 1938-39

- September 24th—Field day. St. Jerome, P.Q.
- October 19th—Opening dinner. Speaker: Brig. R. O. Alexander, D.S.O. Subject, "National Defence."
- October 21th—Visit to plant of David & Freres.
- November 4th—Speaker: K. A. Mapp, Dominion president, the Canadian Society of Cost Accountants and Industrial Engineers. Subject, "Some problems as Between Business and Government."
- November 18th—Lecture meeting. Subject and speaker to be announced.
- December 2nd—Speaker: P. W. Wright, Shawinigan Engineering Co. Ltd. Subject, "Accounting for Fixed Assets."
- December 18th—Debate. Subject to be announced.
- January 16th—Lecture meeting. Subject and speaker to be announced.
- January 27th—Annual smoker.
- February 10th—Lecture meeting. Subject and speaker to be announced.
- February 24th—Student night.
- March 10th—Lecture meeting. Subject and speaker to be announced.
- March 24th—Mock trial.
- April 21st—Speaker: Dr. Charles Reitell, Messrs. Stevenson, Jordan and Harrison, Management Engineers, New York City. Subject, "A Profit Plan for Manufacturing."

New Members

Toronto.

J. A. Wright, 162 Hillhurst Blvd., Toronto.

J. L. Rapmund, Burroughs Adding Machine of Canada Ltd.

Hamilton.

J. B. Scott, Canadian Porcelain Co., Ltd.

Kitchener.

J. Farnworth, Stauffer-Dobie & Co., Ltd., Galt.

ADAPTING OFFICE PROCEDURES AND FACILITIES

Adapting Office Procedures and Facilities to Administrative Requirements

By

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Prepared for the Seventh International Management Congress,
Washington D.C., Sept. 19th-23rd, 1938

SUMMARY

Office operations and facilities have been re-arranged and re-organized so that the increased requirements of administrative officers could be met. Administrative officers want reports and information in such a manner and at such times as will permit them to formulate policies, correct and redirect operations, and to be currently informed as to operating results. Employer-employee relationships must be in harmony, and customers' requirements properly met. They want the assurance that procedures have been set up which will ensure the successful accomplishment of their plans and policies. In all these requirements the office plays an important part.

Control over office operations is best exercised by the establishment of standard practices whereby all repetitious and routine activities are handled on a uniform basis, thus ensuring continuity of operations with a minimum of supervision. When subordinate management is relieved of the necessity vested in planning and improving these operations. The current trend of interruption by routine matters, a greater amount of time can be in management is toward greater and greater standardization.

In the exercise of "control functions," the office executive has available many effective instruments. In the broader sense these practices may be divided in the following manner:

1. Determination of organization activities
 - (a) Establishing routines
 - (b) Centralization of comparable functions
 - (c) Studying and analyzing all jobs
 - (d) Setting up definite organization structure with:
 - (1) Defined duties
 - (2) Defined responsibilities
 - (3) Defined authority
2. Co-ordination of personnel and facilities
 - (a) Men
 - (1) Employment and selection methods
 - (2) Training and educational program
 - (b) Methods
 - (1) Standardization of forms and other printed matter
 - (2) Study and improvement of office services

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- (c) Equipment
 - (1) Mechanization of operations
 - (2) Installation of adequate and efficient physical facilities
 - (4) Maintenance and replacement of equipment
- 3. Budgeting office expenses
 - (a) Development and use of budgetary procedures
 - (b) Development of production measured by "unit cost" comparison
 - (c) Constant attention to details for change and improvement.

In the early period of the development of scientific office management, the problems of the office were secondary to the other problems facing the administrative officers. The office procedures were simple. The requirements for office services were few. No specialized viewpoints punctuated the operations. Gradually conditions changed. There developed several factors which ultimately influenced office procedures. Briefly, these factors were:

1. Regulatory and tax legislation required complicated and specialized reports.
2. Business became more complex and management required more detailed information.
3. Business speed was accelerated and management required reports at shorter intervals.
4. Competition between organizations increased the reward for greater speed, accuracy, and efficiency.
5. Profits declined during the great depression (1929-1935) which required more economical operations.
6. Mechanical equipment was improved which permitted the further mechanization of office operations.

In general, the office operations and facilities were re-arranged and reorganized so that they would be "in tempo" with the balance of the organization, and so that the increased requirements of the administrative officers could be met.

What Do Administrative Officials Require?

The requirements of the administrative officers can be summarized in one word, "control." As a tool of management devoted to controlling, directing, and co-ordinating activities, the office is an indispensable part of the business. Administrative officers want reports and information in such a manner and at such times as will permit them to formulate policies, correct and redirect operations, fulfill the organization's objectives, and to be currently informed as to operating results. Administrative officers want the assurance that procedures have been set up which will ensure the successful accomplishment of their plans and policies insofar as it is possible to do so. They want to know that the employer-employee relationships are in harmony, and that the customers' requirements are being properly met. In all these requirements the office plays an important part. Office procedures and facilities have been adapted to administrative requirements.

Control over office operations is best exercised by the establishment of

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standard practices whereby all repetitious and routine activities are handled on a uniform basis, thus ensuring continuity of operations with a minimum of supervision. When subordinate management is relieved of the necessity of interruption by routine matters, a greater amount of time can be invested in planning and improving these operations. The current trend in management is toward greater and greater standardization.

DETERMINATION OF ORGANIZATION ACTIVITIES

There are three factors or elements in the organization set-up—men, the human element; machines, the physical element; methods representing the third element. Management is involved in the control of these three factors. Organization is involved in their combination. Efficient organization is brought about by the establishment of routines, the study of the individual job, the planning and scheduling of the tasks for completion, and the careful study of the whole range of activities so that the three factors named above will be in harmonious balance.

Establishing Routines.

The paths followed by work as it goes through the various departments, from beginning to end, are called routines. They cannot be established on a logical and practical basis unless the whole office process is studied. Much time and effort is lost when departments are arranged without consideration to their inter-relationship. The first step in the establishment of routines is the preparation of the floor-plan showing the location of each department or section. On this floor-plan, the most important routines can be traced. The diagram will show the movement of the "basic paper work" from section to section, department to department.

It is usually possible to estimate the efficiency of the office lay-out and the routines by observing the amount of inter-departmental and intra-departmental movement of the personnel. Much movement indicates inefficiency. There are more efficient methods of communication than personal contact for ordinary office work. When the routines are reduced to a scale-drawing, there is before the office executive a visual over-all picture of the "flow" of work. It rather resembles a road map—curves, detours, and straight roadways are easily discernible. Routines should be simple and easily followed. The origin and destination of every form and record should be determined, but routines should be established for only the most important and basic work. The customer's order is the backbone of office activities. It should take precedence over less important work. Purchase orders also are basic in the consideration of routines. It will be discovered that in every office there are two or three really important routines, and that practically all office services are the result of the handling of the details involved in those routines. Other services are secondary to them.

When the complete routines have been established, each individual step in the routine should be analyzed. Only when the work performed at each step or phase is known and compared is it possible to eliminate duplication, centralize comparable services, and establish standard procedures.

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Preparing Manuals.

Establishing routines makes accomplishments more definite—establishing standard procedures makes accomplishment more uniform. Both of these are necessary to effective organization. Standard methods facilitate specialization, and specialization reduces the ultimate cost. In the establishment of standards, instructions must be issued, authority for the procedures defined, and routines explained. The office manual is the written record of this information, intended to make the standards and instructions definite without the need of further executive action.

Centralization of Comparable Functions.

Centralization is the grouping of employees doing the same kind of work and performing the same tasks. The entire office is a service unit. This service is of two kinds—primary and secondary. The primary service is that for which the department or section was organized, and which is rendered direct to the operating, financial, or accounting divisions. The credit department, for example, is a primary department rendering service direct to the operating and financial divisions; nevertheless, there are needed secondary services such as typing, stenographic, calculating and filing. The secondary services are those required by a primary department in order to make its service available. Normally the primary service departments are staff departments.

The trend is toward complete functional centralization. The advantages are apparent:

1. Problem of supervision is reduced.
2. Personnel is reduced (by reducing waste time).
3. Organization is more flexible.
4. Specialization is made possible.
5. Training methods can be improved.
6. Absent time is reduced.
7. Vacation replacement requirements are reduced.
8. Measured production is made possible.
9. Comparison of production between employees is easier.
10. Service is increased—both as to scope and speed.
11. Introduction of incentive plan is facilitated.
12. Employment can be stabilized.

CO-ORDINATION OF PERSONNEL AND FACILITIES

In carrying out administrative policies, success or failure is dependent in a great measure upon the personnel, the first of three major factors, and its supervision. These activities, as it has been pointed out, can be directed by the establishment of routine procedures and standard practices. The quality and quantity of activities depend upon placing the proper person in the right position.

Employment is no longer the selection of an available and willing applicant. Specialization, standardization, and mechanization of operations have raised problems in employment which did not exist in the early stages of industrial development. The employment executive must therefore know the requirements and the specifications of the job for which he

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is hiring. He must also depend upon more scientific means for his selection.

If employment stabilization is to be effective, more thought must be given to abilities, both present and potential, because job satisfaction depends upon job performance.

Job Study and Analysis.

The information obtained from the job study makes possible the successful execution of all office functions including employment, training, and the establishment of standard operations and standard production.

Job study is the entire study of a job including the analysis of the work to be done, the method of doing the work, working conditions, specifications, and every other determinable factor involved in the job which will influence the successful carrying out of its requirements. From the job study, the employment manager obtains the job description, the job specification and job requirements. From the job study, the information on work to be done and methods can be obtained for training purposes. Job rating, job classification, and job standardization are impossible without job study information. Salary standardization and administration is facilitated by the job study.

ESTABLISHMENT OF METHODS

The second factor in the managerial triangle is methods. The mechanization of office operations has changed the problems of methods, as well as management. When employees individually completed full cycles of work, diversity of capabilities was required. Management was concerned in the correlation of these individual activities and to that end methods were important. Upon supervision fell the burden of control.

As the office procedures were mechanized, operations were broken down into units, and similar operations were centralized. Individual employees now performed repetitively only one or two phases of a complete cycle of operation. Into the picture, the problem of monotony was interjected. Correlation now involves the balancing of the individual performance, as well as group performance—each employee is dependent upon the performance of the employee immediately behind and ahead of his particular operation. He is part of a collective enterprise and he must adjust his activities accordingly, yet he remains an individualist as far as his behavior reactions are concerned. Many of our social problems arise from this dual role. The failure of the employee to co-operate in the adjustment, and the failure of management (in some cases) to recognize the necessity of assistance in the adjustment, cause industrial strife.

Standardization of forms.

Office forms are used to record the various facts and figures arising from the activities in the office, and to bring them together in such a manner that office services are expedited and results made uniform. As the work passes from unit to unit in the office, devices are required to record the progressive accomplishment. Management is interested in results. This may be accomplished by providing uniform instruments where-

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by the individual activities are directed automatically toward a predetermined objective.

In all office procedures an objective viewpoint must be assumed. Each operation should be questioned in light of its contribution to the ultimate end. Practical economies can be effected when unnecessary steps are eliminated—temporary economies result from an arbitrary reduction of office services without regard to requirements. In the cost of forms, there invariably is found in addition to the printing and material costs, handling expenses such as clerical labor required in the preparation of the form; filing expense; postage expense; rent expense (for clerical and file space). It is necessary to consider the total cost of forms in measuring their effectiveness.

The advantages in the use of standardized forms are numerous:

1. Copy (and recopy) work is reduced.
2. Interpretation is easier.
3. Information is developed and presented in a logical sequence.
4. Permanent historical record is provided.
5. Uniformity is guaranteed.
6. Services are facilitated.
7. Services are made more available.

Mechanization of Operations.

Office machines represent the third factor in the management triangle. Their use furthers the office services and facilitates their completion. As a tool of management, their effectiveness is unchallenged; however, like all tools, their use is dependent upon the skill of the user.

Office machines are used because of one or more of the following reasons:

1. Reduces personnel, or increases production capacity so that additional personnel is unnecessary.
2. Speeds up production so that work schedules can be maintained.
3. Improves the quality of the work (appearance).
4. Reduces errors due to human element.

The selection of office equipment is like the selection of any tool, it must be adequate, as well as suited for the task. The selection of office equipment depends on many factors, a few of which are:

1. The objective viewpoint—the work must be necessary.
2. The system under which it will be used must be the best from the standpoint of an economical and productive operation.
3. The operation must be permanent.
4. The operation should be standardized.
5. The operation should be the result of the combination of similar activities in order to avoid duplication of effort, and to ensure sufficient volume for machine operation.
6. The machine must be suited to the work.
7. The machine should be selected only after an exhaustive research of all available equipment of a similar type.
8. The availability of operators (supply of labor) should be considered when selecting a complex machine.

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9. The availability of service should mechanical repair become necessary.
10. The effect upon the other operations in the organization, and the effect upon the employees (social viewpoint).

Physical Factors.

The influence of physical factors is too large a subject to give exhaustive treatment here. Suffice it to say in passing that the efficiency of the employees is affected by these physical factors. They contribute to the personal comfort and convenience of the employees. Any factor which influences efficiency thereby effecting the accomplishment of the ultimate objective is an element which must be considered in executing administrative policies. Personal efficiency is influenced by:

1. Proficiency of the employees.
2. Development of routines.
3. Co-ordination of activities.
4. Adequacy of physical equipment.
5. Competent supervision.
6. Proper working conditions and facilities.
7. Proper arrangement of space and allocation of facilities.

If these factors are given consideration and reasonable attention is paid to their improvement, administrative policies will be carried out to the satisfaction of management.

BUDGETING OFFICE EXPENSES

In the conduct of administrative procedures there is just as much of a demand for economy in the office as there is in the primary operations of the business. A basis for control of expenses, like operations, can be established in two ways:

1. By constant observation and investigation by the supervisory staff and by management.
2. By the conscious direction and redirection through the installation of systems and routines.

Budgeting is planned advance thinking; it is an effective method for promoting office economy because:

1. In building the budget, a thorough investigation of fixed and variable expenses must be made. The operating program must be co-ordinated so that estimated sales and estimated production (in quantity) will be in balance.
2. Comparison of anticipated accomplishments with actual results will develop causes of variation. The explanation of these variations requires investigation. The operating information thus developed can be used as a guide in estimating and correcting future operations.
3. Comparison of anticipated and actual results automatically indicates trends in unit costs. Decreases in volume, increases in expense, or both are clearly discernible. Corrective action is made possible.

Unit Cost Measure. Divide the total cost by the number of units

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handled and the result will be the cost of one unit—an intelligent measure for computing and evaluating cost trends.

An increasing payroll does not denote increased costs if volume was proportionately greater. Both total expense and total volume must be jointly considered. To compute unit cost, it is necessary to have an accurate measure of production. Observation of productive effort is not a sufficient basis for determining personnel increases or decreases, and expense control. Observation is unscientific and often faulty.

If measured production is impossible, or at least unreasonable, measure only the basic work such as customers' orders and purchase orders, and compute unit costs on that type of work. All other office activities will be in reasonable relationship thereto and trends can be observed. In actual practice, increases or decreases in volume do not result immediately in compensating increases or decreases in personnel. Only long-range corrections are desirable. Organizations cannot be built on rapidly changing personnel.

STABILIZATION OF WORK AND EMPLOYMENT

Social pressure is making manifest to the employer the justice in stabilization of employment. Stabilization does not contemplate the employment of more workers than can be economically and profitably used. Neither does it mean the reduction of the personnel below normal in order to reduce the number of potential benefit seekers. It means to make employment secure, to bring into an equilibrium the work load so that violent fluctuations in the number of employees can be avoided.

Stabilization is discussed as part of this paper because the social aspects of unemployment legislation will have definite future influences. It is recognized that efforts to stabilize employment are ineffectual during periods of severe economic recession. If, as it has been pointed out by some authorities, stabilization results in the creation of a permanent unemployable class, it will have to be recognized and dealt with as such—the advantage being that it will be known as such in fact, rather than in theory.

Many of the procedures and instruments by which administrative policies are carried into effect will also be used in bringing about partial or complete stabilization. These are briefly enumerated as follows:

1. Proper selection of employees so that a stable organization can be built.
2. Proper training methods to increase proficiency and production—resulting in employee satisfaction.
3. Proper and adequate facilities and equipment.
4. Proper attitude of management toward employer-employee relations.
5. Proper consideration of employee comfort and convenience, resulting in increased efficiency.
6. Proper attitude toward the personnel program including employee's services and employee's activities.
7. Proper and considerate supervision.
8. Proper consideration toward employee safety and future welfare.

ADAPTING OFFICE PROCEDURES AND FACILITIES

Those forces, both internal and external, which cause a more serious and intensive consideration of the activities of an organization and the means by which these activities are controlled, will produce beneficial results for those who approach the study of the problems with an unbiased mind. When men, methods, and machines are brought into harmonious and balanced relationship, profits result.

CONCLUSION

The office is a service unit, organized to assist the operating, financial and accounting divisions. The manipulation of the internal forces so as to achieve a maximum volume of work of an acceptable quality at the lowest possible cost, and in such a manner and at such times as to promote the objectives of the business with due consideration to physical and economic welfare of the employees, the requirements of society and the limits of legislation—that is the desire of business administration. That desire is expressed in terms of policies. The execution of these policies is the responsibility of executive management. How well the policies are executed, and how conscientious are the means by which these objectives are attained, can be determined over long periods by the survey and analysis of the operations.

The principles of office management are guides to practical accomplishment. In summary they are:

1. Determine the necessity of doing the work.
2. Determine the problems in doing the work.
3. Establish a standard method of doing the work.
4. Recognize the importance of making the standard method permanent by recording it in the manuals.
5. Establish training methods.
6. Determine by job analysis the specifications of the persons to do the work.
7. Select those persons with care.
8. Develop a definite organization.

Profits in the future will be made by careful attention to details, by the application of scientific principles to operations, and by the co-operative effort of management and employees. Operations will be further standardized. Rewards will be given for those who merit them. Society will have a greater influence in the management through legislation and "public opinion."

Beyond the scope of specialization, standardization, and socialization, the real problems of capital and labor, master and servant, must be answered by "common-sense" rather than mechanical means.

The Relation of Time Study With Cost Accountancy

By
GORDON LOWE

Introduction.

The past twenty years have witnessed a change in the science of time study from the stage of theory and experimentation to that of prosaic fact and value. It is general to find in manufacturing organizations of the present day employing over two or three hundred operatives some form or other of time study.

It is proposed to discuss, within the scope of the present article, some of the more important factors to be considered when studying the relation between time study and the cost accountancy side of the business.

The Cost Account.

The cost account actually represents a manufacturing account, sectionalized or departmentalized and embodying in detail a certain degree of control of material, labour and overhead charges. It represents a reliable and accurate method of statistical control from the financial and estimating point of view. However, it has some disadvantages, the main one being that before this account can be completed it is necessary to take a physical stock in each manufacturing section. The first figure shown here gives a specimen cost account for the department of a factory. Material, labour and overheads are duly charged on the debit side and the department is then credited with the cost value of the output for the period under review, and also with the stock at the end of the month. The profit or loss on material or labour is then shown and the account balanced off.

The writer has found, with regard to overhead charges, that it is desirable that those on the debit side of the account, i.e., £1,558, should be liquidated by means of a percentage of labour, and the labour items on the credit side of the account in the manner shown.

The scope of the cost account covers the whole of production activity and it is an efficiency measurement of a very vital type. Another disadvantage, apart from that of physical stock-taking, can be found in the fact that even where a big loss is shown in either material, labour or overheads, in most cases the reason how or why that loss has occurred would not be able to be traced from the cost account.

The problem of material losses in practically every industry is settled a docket system which records the movement of all material from one to-day by the issue of manufacturing specifications and the installation of section to another, thus permitting any material loss to be discovered almost as soon as it has been made.

As far as overheads are concerned, such items as rent and taxes, depreciation, insurance, heating, supervision, salaries, etc., remain fairly constant and do not fluctuate in proportion to output. There are really only

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three possibilities of loss in respect of overhead charges, and these can be enumerated as:

- (1) A general loss due to insufficiency of work.
- (2) Excessive manufacturing waste.
- (3) A leakage such as wastage of power on a machine.

Taking into account, therefore, the above items, readers will agree no doubt that the main item in the cost account which calls for more detailed study is that of labour, and it is in this section that the application of time study can greatly assist in the maintaining of detailed and yet simple methods of statistical control.

Time Study as a Factor of Efficiency.

It may prove interesting to emphasize, before proceeding to detail forms of control which can be used as far as labour is concerned in the factory, that time study has probably done more to increase productive efficiency than any other factor in the history of economic production. The manufacturer has found, as a result of introducing time study into his business, that it is possible to determine a standard time for the carrying out of any operation or job and so gauge immediately the dexterity or efficiency of any operative by comparing that individual effort or result with the standard for the same job.

It will be realized that many factors have to be taken into consideration when time-studying a process or job, and it is not the purpose of this paper to discuss these in detail, one primary essential, of course, is that the operating conditions must be as good as possible.

In the following paragraphs various returns or forms for maintaining labour control are outlined and are recommended for consideration.

Departmental Labour Control.

In any factory organization the fundamental function, of course, is that of producing a specified quantity of products at a cost not exceeding an estimate predetermined. Naturally, if production is completed at a lower cost than that estimated, an additional profit is the result. On the other hand, a cost for production over that agreed in the original estimate will result in a loss being incurred. In Fig. 2 is shown a weekly departmental labour control sheet, illustrating how the wages, i.e., labour, can be controlled weekly in each producing department throughout the factory. The working of the sheet is perfectly simple. Each week the total wages paid in each department are entered against the respective sections. The output from each department is then valued at the labour allowance for each specific job and the difference between the wages paid and the labour output value is then shown as a profit or loss.

If a consistent labour profit is found in a particular department, then the following deductions can be made:

- (1) Over-estimating or over-costing has taken place, resulting in the estimate being too generous.

If a consistent weekly loss is the case, this would mean that:

- (1) Labour is being spent on an excessive manufacturing waste.
- (2) The estimates are too low.

With the assistance and information rendered by this sheet, it will be seen that the production manager can contact with his time study

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engineer and, in course of time, gradually set time study rates throughout the factory, resulting eventually in greater productive efficiency.

Controlling Non-Productive Labour.

Time study and piece rates will enable any operation directly associated with production to be controlled in practically every producing concern. However, it is not always so easy to control to the same degree the non-producing items of labour, such as sweeping and cleaning, errands, servicing, etc., and in Fig. 3 is shown a weekly labour report, giving two very valuable items of information:

- (1) The relation between non-productive labour and productive labour.
- (2) The relation of piece work to the total productive wages paid.

Non-Productive and Productive Wages.

A careful segregation of the various wages paid in a department will often reveal that non-productive wages are exceedingly high and the issue of a report, such as here shown, each week will have the psychological tendency of the transference of non-productive labour to productive work wherever possible. The percentage of non-productive to productive wages should, in any case, be known each week as this must be allowed for in estimating for future work.

Piece Work and Time Work.

Under ordinary conditions it is safe to say that the labour cost of an operation is reduced by at least 15% when a job is transferred from a time basis to a piece basis, and therefore it is of some importance that the amount of time work as compared with piece work should be known in a department. Theoretically there should not be any time work at all; time study engineers will invariably say that there is no operation or job which cannot be successfully time-studied. In practice, however, owing to a variety of localized reasons, there are usually one or two jobs in each department which are not put on piece work rates, and in consequence it is necessary to control carefully the proportion of time work to piece work each week, in order to ensure that as much as possible of productive work is paid for on a piece basis.

Conclusion.

The efficiency of labour in any department or in any factory should be clearly shown by the use of the three forms shown in this article. A time study engineer would obtain valuable information from their use and be able to tell the various sections of the factory that are calling for the application of the stop-watch.

In conclusion, it should be emphasized that time study to-day represents a correlation of manufacturing accounts with the wage book, and as time study is more widely applied throughout the organization, so it should become easier to obtain controlling statistics. At the same time, the risk of loss in wages should be decreased substantially, even possibly, entirely eliminated.

CONSTRUCTIVE PURCHASING POLICIES

Constructive Purchasing Policies

By

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Prepared for the Seventh International Management Congress,
Washington, D. C., September 19th, 23rd, 1938

SUMMARY

Constructive purchasing policies cling to the moral code as a matter of good business and consider the future as well as the immediate effect of procurement methods on the potential profits of business. Progressive managements know that the more common use of such policies would tend to stabilize business, and therefore have implications of great importance to public welfare. They are not universally used by the industrial establishments of the United States because there are many firms which either do not agree with, or have not formulated and executed similar policies. Therefore, the managements which desire to use progressive policies modify their procedure to meet such competition.

To extend the use of constructive purchasing policies management must be willing to state them. Their execution must be delegated to a purchasing department with qualifications and characteristics of personnel which enable them to deal with the surrounding departments and vendors whom they serve. Constructive purchasing policies should prevent the setting up of unnecessary delivery requirements which result from poor planning, thoughtlessness, or unethical speculation. They should connote a price which includes the profit necessary to perpetuate the efficient producer and distributor; they should be suspicious of a uniform price; if reciprocity is involved, they require that it be practiced without abrogating the functions of the purchasing department; and that the results, like those of speculation, be segregated to show the profit or loss.

The purchasing department has responsibilities to management; to the surrounding departments; and to the vendors. All must be convinced that their interests are being served best by confining negotiations to the purchasing department, the prerogatives of which are negotiation and selection of source of supply, not negation of a user's specification for particular quality.

The effort of establishing constructive purchasing policies is more than justified because of the results which they render possible.

Constructive purchasing policies are part of the philosophy of management and are based on principles which consider the future as well as the immediate effect of procurement methods. They should cling to the moral code as a matter of good business.

Actually, the fact that a given management subscribes to such a statement does not guarantee that all of their procurement transactions are carried out on that basis, because, as a practical matter, they are modified to meet the competition of other firms with less ethical, or at

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least more flexible, buying and selling standards. This has induced buying and selling standards. This has induced buying and selling habits and procedures in the industrial firms of the United States which can be identified and grouped; first, into those characterized by lack of any policy; next, those indicated by the more or less haphazard execution of a partially formulated policy; and more infrequently, those made noteworthy by evidence of constructive purchasing policies. As might be expected, the latter class comprises those firms which have given great consideration to the economic and social aspects of management methods, and which therefore appreciate that purchasing not only contributes to the potential profits of business, but that the purchasing practices of the industries of the nation have a definite effect on public welfare, because their characteristics tend to exaggerate or minimize the extent of the fluctuations and length of the business cycle.

One of the exaggerated factors is the setting up by buyers of unreasonable or unnecessary delivery requirements. These are most common when there is fear of a limited supply or a price increase, but in any event they exaggerate demand, accelerate price increases, place unnecessary pressure on production; and if the sales department, threatened by loss of business to the competitor who is held out as always being able to supply everything at once, accepts more than can be delivered, it leads to broken promises.

BROKEN DELIVERY PROMISES

These can be broadly divided into three groups:

- (a) Those resulting from inefficiency on the part of the supplier;
- (b) Those resulting from unnecessary delivery requirements of the buyer; and
- (c) Those resulting from unreasonable delivery requirements of the buyer.

There is no excuse for group (a). Group (b) represents the uncertain and nuisance element in the delivery situation because the seller never can be sure when a buyer is really justified in demanding an "at once" delivery. It apparently has become a habit of purchasing agents to specify "Rush," "At Once," "Immediate Delivery," "As Soon As Possible," etc., and the proportion of such requests shows that there can be no justifiable basis for assuming that there is a legitimate requirement for such short delivery in every case. Group (c) must be fairly viewed from the buyer's side as well as the seller's. The buyer may have a legitimate reason for requesting the co-operation of the seller, but the seller would be in a better position to meet such demands if the unnecessary requests of group (b) were eliminated.

It is hardly probable that the purchasing agent is entirely responsible for unnecessary or unreasonable delivery requirements as he may be the victim of inefficiency within his own organization. The buyer's planning department may be covering up poor scheduling when it insists on certain delivery dates; or the management may have set inadequate stocking requirements, both in regard to raw materials and purchased parts, as well as finished stock. Thus the purchasing agent can be the centre of a vicious

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circle of conflicting elements from within and without his company. His only escape is to pass the burden on to vendors, with the result that the seller is required and expected to make up for the inefficiency and delay of others.

As a part of unreasonable delivery specifications, there must not be overlooked the demoralizing effect of the orders placed speculatively with the intent of cancellation, or forcing of a price allowance, if the market turns unfavorably to the buyer. Here again, the threat of "no future business" is made if the seller does not accede to the proffered settlement.

PRICE

The free competitive system on which our industrial progress has been made, would not have been possible without profit. Admitting that one of the fundamental reasons for business existence to-day is the perpetuation of jobs, it must also be axiomatic that new jobs cannot be made, or even the old ones held, unless a profit is possible. Therefore, management should expect to pay a price which represents a fair profit to the vendors. This certainly does not mean a uniform price throughout the industry, as that is the result of either government regulation, or trade restrictions which are designed to keep the most inefficient producer and distributor in business. The extent to which it occurs is a measure of regimented business, with denial of free competition.

A uniform price signifies high cost producers kept alive at the expense of the public; and the supplying industry as a whole will suffer in time because progress inevitably will replace the product with something as good and cheaper. Theoretically, a management might inquire into the conditions underlying the production and sale of a desired article or commodity and its relation to price. A fair price results from costs based on reasonable and adequate wages for the kinds of skill required in manufacture; from the proper selection, acquisition and fabrication of materials; from good management methods; from technical control to maintain quality; from research to improve and cheapen the product; from suitable distribution methods, plus a reasonable amount for the profit necessary to perpetuate the business. Such a price must be competitive and it is unbelievable that the price of one vendor calculated separately should be exactly the price of many other vendors.

Practically, management cannot ascertain all the surrounding factors which enter into the price making of all the commodities bought. Merely to establish the factor of "fair labor cost" involves subjects such as the "cost of living" in various parts of the country, "closed shops" versus "open shops," etc. Even to inquire about the use of union labor brings up the subject of what kind of union labor, and even labor does not now know the answer. Management is entitled, however, to desire the vendor to make a profit, without being too greatly obligated to determine the reality of the profit. If the vendor wants to quote or take the business on a certain basis, the buyer cannot be criticized for placing the business with the low bidder, provided all the other factors which go to establishing the proper selection of a vendor have been satisfied.

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Turning it around, management as a matter of policy, should require a purchasing department to accept a low bid, or advance logical reasons of vendor lack of facilities, experience, finance or reputation. Equally concerned, management should regard uniform prices with suspicion. The mere fact of the commonness of uniform prices does not change their fundamental unsoundness.

RECIPROCITY

Shall management as a company policy entertain Reciprocity? If so, to what degree? Management viewpoints differ. The head of a national firm writes: "We regard reciprocity as an evil to be deprecated and harmful from every point of view." Another large firm states: "We do not feel that it is fair to our product to let the prospect of future purchases from us influence us to buy equipment or materials which we do not consider best for our business, either from a quality or price standpoint." There are other firms who think so well of reciprocity that the purchasing agent is a salesman, and may pride himself on the sales which his purchases render possible. A sensible attitude is expressed by a vice-president of a large firm who writes: "As one constructive policy in connection with purchasing, I would suggest this, that in making purchases so conduct yourself as to induce the man from whom you buy to buy your product." That does not denote coercion, but attempt to build good will.

Reciprocity cannot be ignored in any case, but if dealt with in any other than a common-sense manner, it not only will not be ignored, it will dominate the purchasing habits of a company. Under such conditions management must watch that inferior materials at high costs are not imposed on the production department by the sales department, with the procurement function entirely abrogated. If the sales department insists that a profit has been made, management should have the whole transaction examined and the excess costs, be they first costs or production costs, charged against sales to establish the facts they claim. Reciprocity can be practiced on this basis, or on the less troublesome one of always giving the vendor who buys your goods a chance at your business on the same basis as all the other vendors. If buyer's goods and vendor's good are properly priced no complicated reciprocity sheet should be necessary. Other factors being equal, the vendor who can use the buyer's product is entitled to an equitable share of the buyer's business.

SPECULATION

A purchasing department is expected to maintain a safe working balance of materials so that the company is not handicapped by delays resulting from shortages. If conditions seem to indicate the desirability of buying in considerable excess of immediate normal requirements then speculation is involved and management usually takes part in reaching the decision. If management is willing to authorize speculation, it should also be willing to segregate the results and show the profits or losses from the practice.

ADMINISTRATION

Management having stated its fundamental philosophy of buying,

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with the actuating principles, must then consider how the desired practices can be attained as an administrative function. Definition of objectives is the first requisite and is stated by Prof. H. T. Lewis of the Harvard School of Business Administration as follows:

1. To relieve the using departments of what should be for them an incidental necessity of obtaining the materials required in the operation of those departments.
2. Through specialization, to acquire such materials more efficiently than otherwise could be done.

Purchasing is a specialized function because of the peculiar type of knowledge and judgment necessary.

- a. To anticipate the requirements of users.
- b. To interpret price trends and market conditions.
- c. To locate and determine the reliability of sources.
- d. To negotiate with vendors.

It is a major function of business not alone because of the percentage of total expense represented by these expenditures, but because of the implications which its performance has for the profits of the company, through cost reduction, quality control, pricing policies, and customer's good will. The actual duties assigned, as a matter of organization, will depend upon the peculiar circumstances affecting the individual company.

Another approach to the duties assigned is noted by Prof. Schell of the Massachusetts Institute of Technology, who takes the position that anything which improves vendor relations is a part of the job of the purchasing department and conversely anything else is excluded.

The acceptance of such definitions by management of the purchasing function automatically establishes it on an equal basis with the other major functions of production, personnel, sales and finance, and the exercise of the purchase function is delegated to a department organized for the purpose, and whose size and duties depend on the particular structure of the company and the availability of personnel.

PERSONNEL

It is at this point management may fail by neglecting to use sufficient care in selecting personnel, with the result that the business gets an order department and not a purchasing department. Many managements might be surprised to know how little their purchasing departments have to do with the actual purchases of the company other than rubber stamping the orders. Assuming that the company thinks it has established a purchasing department, management must accept the blame for failing to arm it with a top person capable of fulfilling expectations.

Management must recognize that procurement as a centralized and delegated function is relatively new, and many production executives regard the buying of material through a purchasing department as an abrogation of their privileges and authority. Therefore, it takes a particular kind of personnel to buy, as it deals with human relations both within and without the organization, and frequently the internal relations are the more difficult to establish on a co-operative basis.

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First:—A purchasing executive must be imbued with a spirit of service, as only by his complete recognition and acceptance of the fact that his function is one of service and not operating, can he expect adequately and acceptably to fulfil his destiny.

Next, he must have the incurable optimism of a master salesman with faith in the value of his profession. Of greatest importance, he should enjoy the business of barter or trade and be able and willing to meet the other fellow on his own ground.

Furthermore he should have a bounding desire not to be chained to his desk but through actual observation of the use of material purchased constantly to increase his knowledge and thereby be of greater service. The technique of purchasing for an industrial establishment is acquired through special training, experience, and the possession or development of certain natural qualifications.

A general purchasing agent should have a technical and business training to understand the use of materials and their cost. It is not sufficient to pick out an engineer or chemist, or a business school graduate with the essentials of honesty and reliability, and hope for the best. As already noted and here emphasized, he should have aptitude for and enjoy business transactions as differentiated from the completely engineering attitude. He should be of a positive type, although not too obvious about it, tenacious of purpose, without being combative or over-aggressive. He must have the diplomacy to hold his job, without ever setting aside his objectives. He has to be a salesman of ideas to his own management and associates, not being discouraged by failure of their immediate acceptance, or ever failing to re-submit at an opportune time an idea in which he believes there is merit. Particularly should management guard against a person who, because he is spending money, is liable to become filled with an undue sense of his own importance, as he is a likely prey for the subtle tongue of flattery. Also guard against those who may acquire a sadistic complex and take it out on vendors, with natural harm to vendor relations.

Finally, management should not expect infallibility, as the purchasing department is human, salesmen to the contrary notwithstanding. It is unlikely that such a paragon can be found, and even if found he still needs the backing of management to render its policies effective. Perhaps the difficulty of finding the right personnel explains why so many purchasing departments are order departments, but frequently the blame can be placed squarely on managements which are unwilling to pay the price for securing and keeping purchase executives who are qualified to meet and deal with other major executives. A clerk vested with the title of purchasing agent and expected to execute company policies is at some disadvantage in dealing with the requirements of a productive executive getting ten to twenty times his annual stipend.

Many firms realize the importance of adequate personnel—as evidenced by the policy of a national company that writes as follows: "One member of the staff (which is composed of our most experienced functional executives, who were relieved of their operating responsibilities and moved behind the lines so that they could see things in perspective, study reports,

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trends, budgets, etc.), was our most experienced purchasing agent. He does no purchasing now, but consults and advises with the staff, advises control management and also consults and advises with the general manager of each division and their purchasing departments. We think, with free time for study, that he secures a broader outlook and can watch broad trends better than the busy purchasing agents, who have to purchase world market products such as rubber and cotton, as well as domestic supplies, and cannot spend much time on the study of trends."

THE VIEWPOINT OF THE PURCHASING DEPARTMENT

The purchasing department having been charged by management with the execution of constructive purchasing policies, must set up a suitable procedure and orient itself with relation to management, the surrounding departments, the vendors and the public. Responsibilities, of which it must be wholly aware, have been assumed; and equally true, there are prerogatives which it must exercise, and in which it must be maintained by management in order to fulfil its obligations to the many elements it serves.

RESPONSIBILITIES OF MANAGEMENT

Loyalty.

As a matter of loyalty to his company from whom the purchasing agent draws his subsistence, he should "consider first the interest of his company in all transactions and carry out and believe in its established policies" (4). "Obviously no buyer is going to hold his job unless he conforms to company rules and policies. If there are some parts of a company policy with which he finds himself unable to fully agree, then he has created a job for himself as a salesman, a salesman of an idea to his own management, an idea that means money to his firm, because of better vendor relationships secured by modification or replacement of the repugnant policy. If an essential part of a successful purchasing procedure is involved, then the purchasing agent has a duty to bring the fact to the attention of the management in a positive way at appropriate times" (1).

Growth.

A further obligation to management is "to strive consistently for knowledge of the materials and process of manufacture, and to establish practical methods for the conduct of his office" (4). "Too many alleged purchasing departments know too little about the materials and their use in their own manufacturing process and even less about outside materials and manufacturing processes. It is the main reason why vendors dislike to deal with purchasing departments, and their complaint is understandable. Unfortunately, vendors, because of their experience with buyers who lacked information necessary to properly conduct negotiations, are likely to class all purchasing departments as something to be avoided. Good procedure is a part of the routine, but it must be realized that any system, no matter how completely documented, will not of itself accomplish anything. It requires actuation and interpretation by people—by people who are constantly striving to know more about their profession, their own manufacture, and subjects which will let them be of greater service to the

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varied group they serve. Only thus can the department bring to the company the service and the ideas and progress which justify their existence" (1).

Results.

Any purchasing department must expect to justify its existence, not only on the long range viewpoint imposed by constructive purchasing policies, but also on the results of its day to day operations. This requires that a standard be set up as to what purchasing under efficient management should accomplish. The fact that many of the activities produce a dividend or deficit of good will should not prevent an attempt to measure the efficiency of the tangible factors.

"Any valid analysis of purchasing expense involves a consideration of the following: purchasing administrative expense; gain or loss resulting from forward buying of materials and supplies; storage and warehouse expense; and losses due to errors and delays. In addition, consideration may be given to the disposition of scrap and waste" (2).

Relations with Surrounding Departments.

A purchasing department is in constant contact with its own organization and "should be receptive to competent counsel from their colleagues and be guided by such counsel without impairing the dignity and responsibility of their office" (4). Naturally, the purchasing agent will recognize within his own company those of particular experience and training and obtain from them opinions and facts pertinent to the procurement of a given article. If these facts or opinions can be developed best by direct contact with a vendor, then the purchasing department would be remiss in its duty if such contacts were not arranged.

Unfortunately for the buying profession, there are instances where the line between recommendation and dictation is so poorly defined that a purchasing department feels constrained to give undeserved importance to the counsel tendered. This breaks down the ability of the purchasing department to function properly, by encouraging and justifying the vendor and user in attempting to by-pass the purchasing department.

Even in well managed companies, where lines of responsibility and authority are well defined, there are those who aspire to the prerogatives of the buyer, and their opinion may or may not be of a quality which should make it invariably sought by the purchasing department. In any case, the purchasing agent should make his own decision based on his own opinion of the competence and impartiality of the counsel" (1).

Vendor Relations.

Vendors usually regard purchasing departments as something to be dealt with only in case of necessity, and their attitude is frequently justified. Some of the following comments offered from the sales departments of concerns with national distribution exhibit this feeling.

"We believe that no purchasing agent has authority to lose money for his concern, which is likely to happen if he does not open-mindedly permit each salesman, who has a legitimate proposition, to fully present his product."

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"Prompt audiences with calling salesmen, and if early interviews are impossible, advice as to when appointments may be had."

"A purchasing agent should refer the salesmen to the engineering department promptly on matters of a technical nature and not try to handle such matters about which as a rule the average purchasing agent knows nothing."

"A discontinuance of the practice of using a quoted price on an inferior article to drive down a price on a better article."

Not all of the irritation can be laid to the purchasing agent because even those earnestly trying to carry out constructive purchasing policies find difficulty in getting vendors to co-operate, usually because the vendor's sales policy has a quite different conception of the procurement function and wants it carried out in his way. Education is needed on both sides.

The Objective of the Purchasing Department.

A successful purchasing department will so conduct its relations with vendors that they have faith in the fairness and capability of the department, and realize that their own best interests are being served to the greatest advantage by such contact. To do this, the purchasing department first must know the actual and potential needs of the company, and the vendors must be convinced of that fact. When the vendor understands that any material must have the approval of the technical, production and purchasing departments, and that the three departments are working together and have no secrets from each other, then the vendor will accept the purchasing department as useful and will act accordingly. Contacts with the other department should be arranged by the purchasing department as needed, and there will be frequent reason for so doing, but the purchasing department should be kept informed by both vendor and the department contacted of developments which would affect the use of the vendor's material either favorably or otherwise.

Prejudice.

A purchasing department is "obliged to buy without prejudice, seeking to obtain the maximum ultimate value for each dollar of expenditure" (4). "Thus is set forth not only the basis for purchasing performance, but also an indispensable attribute of the successful buyer—the ability to judge fairly and impartially the men and materials with which he has to do in properly serving his company. Aptitude, training and experience are necessary qualifications in the exercise of the procurement function, but their possessor must have, above all, impartial judgment, for prejudice—or prejudging without a consideration of the facts—is fatal to the objective set—maximum value for the dollars expended" (3).

Contracts and Specifications.

In the fulfillment of a constructive policy the use of a simple order or contract form with reference to carefully worked out specifications which become a part of the contract is of great help to good vendor relationship. The president of a national firm writes: "There is a growing tendency on the part of purchasing agents to impose vicious 'hold harmless clauses' on sellers—which either mean nothing at all or are so ambiguously worded that they could only lead to litigation if an attempt was made to enforce

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them. There are many that obviously show legal preparation and impose liabilities on the seller which should be rightfully assumed by the buyer and which are ordinarily imposed on the buyer by law. The mushroom growth of the 'hold harmless clause' indicates that purchasing agents are blindly following the practice of others by including a 'hold harmless clause' when new purchase order forms are printed." A true meeting of the minds is an admirable method of creating mutual respect for obligations. A fundamental knowledge of the "uniform sales act" governing the rights of buyers and sellers of merchandise and effective in 33 jurisdictions of the United States including practically all of the important commercial states is desirable. The clash between the provisions of the sales contract form submitted by the vendor and the purchase order form of the buyer lead to trouble and possible litigation. Both order and contract should refer to each other and become a part of the agreement, being sure there are no unreconcilable clauses. It is easier to be sure when there are fewer clauses, and more emphasis should be laid on the intent of the purchase.

Sharp Practice.

Sharp practice will breed sharp practice and unless a purchasing agent admits he is smarter than any of his vendors, then he never can be sure whether or not his company is securing the maximum ultimate value for each dollar of expenditure. Such complacency, self esteem, or ignorance probably would not admit of any other conditions; but whether admitted or not, the question revolves around the relative proficiency of one man versus many men in smart tricks, that is, one purchasing agent versus many vendors.

Sharp practice is a poor prop for a purchasing department. This is not intended to inhibit a purchasing department from questioning price when done with knowledge of costs or quotations on similar products of equal quality or of a quality good enough for the purpose. The sales manager who requested "a discontinuance of the practice of using a quoted price on an inferior article, to drive down a price on a better article," has assumed that his product is the best and that there is no competition from a quality standpoint, which is a very common and understandable viewpoint of vendors.

Prerogatives of the Purchasing Department.

When a using department has stated a need by a suitably authorized requisition, it becomes the prerogative of the purchasing department to conduct and conclude all negotiations, including the selection of the source of supply, for the purchase of the desired material. A purchasing department should consider all of the factors of vendor argument, experience, company policies, together with the desires and recommendations of the technical and using departments. While the purchasing department has a right to question the need of the quality specified, unless it can convince the user, then there is no option but to obtain the quality requisitioned, under the best arrangements that can be negotiated. The prerogatives are negotiation and selection of source of supply, not negation of a user's specification for particular quality.

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CONCLUSION

Constructive purchase policies cannot be made effective by the purchasing department alone. Management must state its policies, and supply and sustain adequate personnel. The co-operation of surrounding departments must be secured, and vendors educated to the use and value of the purchasing department. This involves thought, planning and constructive effort. Such effort is more than justified because of the results which are possible from common use of constructive purchasing policies.

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- (2) Standards of Purchasing Practice. Prof. H. T. Lewis, *Harvard Business Review*, Summer, 1936.
- (3) Editorial. Harry Graham, *New England Purchaser.*
- (4) National Association of Purchasing Agents. *Principles and Standards of Purchasing Practice.*

How Much Should Employees Produce In Order to Earn Their Salaries?

Reprinted from the *Globe and Mail*, Toronto.

How many factory workers know that the average worker in factories should produce \$2.50 for each dollar he receives in wages or salary if the organization that employs him is to continue successfully? How many employers know it?

The amount will differ from industry to industry but on the average that is the relationship according to a study made, and just published, by the Cleveland Trust Company into statistics of income of all United States manufacturing corporations during the nineteen years from 1919 to the end of 1937. Even at that these manufacturers had deficits per employee in 1921 and in every year from the end of 1929 to the end of 1935.

The industries for twenty years on the average have earned \$3,000 annually per employee. In some years the average went as high as \$3,500 for full-time employees and in some years it went down to \$2,500. The highest paid in wages and salaries in this time per person was in 1929 at \$1,465, which compares with \$1,196 in 1919 and a low of \$1,207 in 1933. For 1937 the total was \$1,383.

The companies in 1919 expended on the average \$866 per employee for interest, insurance, advertising, travel, rents, selling expenses and other miscellaneous costs; they paid out \$168 in taxes, \$130 in dividends in excess of those received; \$111 earned for depreciation and depletion and retained \$237 in the business. In that year the earning per employee was \$2,371. They lost \$234 per employee in 1921 and in the last eight years losses have been almost continuous. This cannot continue indefinitely, says the bulletin of the Cleveland Trust Co., and production must increase so that in each year there may be some earnings that can be retained by the company.

COST AND MANAGEMENT

FLASH!

Winnipeg, Oct. 6th, 1938.

Two new chapters of the Society are already assured as a result of the tour of the West by the Secretary-Manager. On Tuesday evening, Oct. 4th, a meeting was held at the Royal Edward Hotel, Fort William, with a representative gathering from Fort Williams and Port Arthur, and at the close it was unanimously decided to form a chapter there. A committee was appointed to complete organization and a further meeting will be held on Wednesday, Oct. 26th, at which the Secretary-Manager the Society will again be present and officers will be elected at that meeting.

To-night, at the Royal Alexandra Hotel here, an enthusiastic meeting heard a talk on "Cost Reduction Through Maintenance Control," and later an explanation of the work of the Society and unanimously decided to go ahead with organization. A committee was elected to arrange the details of a further meeting on Monday, October 24th, when organization will be completed and officers elected.

This is a splendid start and augurs well for the future of the Society. The West is ready and undoubtedly more chapters will be formed as an immediate result of this trip.

After this tour is completed it is planned to organize a chapter in Windsor, Ontario, and members can confidently expect to see the greatest expansion in history. The Secretary has arranged to visit Regina, October 11th; Calgary, October 13th; Vancouver, October 18th, and Edmonton, and on the return journey will again speak at Winnipeg and Fort William.

WANTED

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COST AND MANAGEMENT

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Young man, at present engaged, desires position of Cost Accountant in Toronto or vicinity, with opportunities for advancement. Has had several years' practical experience as Cost Accountant, is well qualified and is at present studying for second year Society examinations. Apply Box 26, "Cost and Management."

Young man, with Collegiate Institute, Normal School and University education, and with experience in Business Management, General and Public Accounting, in addition to Costs Accounting, is at present disengaged and seeks position with a sound organization. Apply Box 18, "Cost and Management."

Young man, studying for C. P. A. degree, at present engaged, but is desirous of a change. Seeks position with good company where there is an opportunity to grow. Has had several years' experience in Public Accounting and Industrial Accounting. Some cost experience. Would prefer position in vicinity of Hamilton or Toronto. Apply Box 30, "Cost and Management."

Young man, married, seeks position as Accountant with Commercial or Industrial Company. Several years' experience in Life Insurance and Commercial Companies. At present located in Eastern Ontario, but would go anywhere for suitable position. Apply Box 31, "Cost and Management."

Young man, at present employed as Cost Accountant in manufacturing firm and with seven years' experience as Accountant and Cost Accountant, desires change. Position as Cost Accountant sought with responsible company, preferably in Hamilton area but not essential. Time study and production control experience. Capable of taking charge. Apply Box 33, "Cost and Management."

Accountant, thoroughly versed in Cost, Industrial and Public Accounting, seeks position where experience and ability will be rewarded with permanent position. Has had nineteen years' experience and has held positions as Office Manager and Secretary-Treasurer. Distance no object if position is secure. Apply Box 34, "Cost and Management."

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